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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------------|-----------------------------------|----------------------|---------------------|------------------|--|
| 10/529,818 | 03/31/2005 | Hiroshi Matsui | Q87174 | 5691 | |
| 23373 SUGHRUE MI | 7590 02/20/200 ON. PLLC | 9 | EXAMINER | | |
| 2100 PENNSY | LVANIA AVENUE, N | MOWLA, GOLAM | | | |
| SUITE 800 WASHINGTON, DC 20037 | | | ART UNIT | PAPER NUMBER | |
| | | | 1795 | | |
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| | | | MAIL DATE | DELIVERY MODE | |
| | | | 02/20/2009 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|--|--|-------------|--|--|
| | 10/529,818 | MATSUI ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | GOLAM MOWLA | 1795 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence ad | ldress | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on | | | | | |
| | - action is non-final. | | | | |
| 3) Since this application is in condition for allowan | ice except for formal matters, pro | secution as to the | e merits is | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-34 are subject to restriction and/or expressions. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the confidence of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Example 11) The oath or declaration is objected to by the Example 11. | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CF | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National | Stage | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | te | | | |

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DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-25 and 27-24, drawn to an electrode substrate and a photoelectric conversion system or a dye-sensitized solar cell comprising the electrode substrate.

Group II, claim 26, drawn to a method of manufacturing a conductive glass substrate.

- 2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature in all groups is the structural limitation of electrode substrate as setforth in mainly in claim 1. This element cannot be a special technical feature under PCT rule 13.2 because the element is shown in the prior at. US 6462266 teaches an electrode substrate as set forth in claim 1.
- 3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species A₁ (embodiment of fig. 1A, 1B, 14 and 25);

Species A₂ (embodiment of fig. 3 and 16);

Species A₃ (embodiment of fig. 4 and 21);

Species A4 (embodiment of fig. 5 and 22);

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Species A<sub>5</sub> (embodiment of fig. 6 and 23);

Species A<sub>6</sub> (embodiment of fig. 7 and 24);

Species A<sub>7</sub> (embodiment of fig. 8);

Species A<sub>8</sub> (embodiment of fig. 9);

Species A<sub>9</sub> (embodiment of fig. 10);

Species A<sub>10</sub> (embodiment of fig. 11);

Species A<sub>11</sub> (embodiment of fig. 12A);

Species A<sub>12</sub> (embodiment of fig. 12B and 12D);

Species A<sub>13</sub> (embodiment of fig. 12C);

Species A<sub>14</sub> (embodiment of fig. 13);

Species A<sub>15</sub> (embodiment of fig. 17);

Species A<sub>16</sub> (embodiment of fig. 18);

Species A<sub>17</sub> (embodiment of fig. 19); and

Species A<sub>18</sub> (embodiment of fig. 20).
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Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

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Species A<sub>1</sub> (embodiment of figs. 1A, 1B, 14 and 25);
Species A<sub>2</sub> (embodiment of figs. 3 and 16);
Species A<sub>3</sub> (embodiment of figs. 4 and 21);
Species A4 (embodiment of figs. 5 and 22);
Species A<sub>5</sub> (embodiment of figs. 6 and 23);
Species A<sub>6</sub> (embodiment of figs. 7 and 24);
Species A<sub>7</sub> (embodiment of figs. 8);
Species A<sub>8</sub> (embodiment of figs. 9);
Species A<sub>9</sub> (embodiment of figs. 10);
Species A_{10} (embodiment of figs. 11);
Species A_{11} (embodiment of figs. 12A);
Species A_{12} (embodiment of figs. 12B and 12D);
Species A_{13} (embodiment of figs. 12C);
Species A_{14} (embodiment of figs. 13);
Species A<sub>15</sub> (embodiment of figs. 17);
Species A<sub>16</sub> (embodiment of figs. 18);
Species A<sub>17</sub> (embodiment of figs. 19); and
Species A<sub>18</sub> (embodiment of figs. 20)
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The following claim(s) are generic: independent claims 1, 7, 14, 18 and 27 correspond to different species.

- 5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the common technical feature in all the species is the electrode substrate comprising a base material, a metal circuit layer that is provided on the base material, and a transparent conductive layer that is electrically connected to the metal circuit layer. These elements cannot be a special technical feature under PCT rule 13.2 because these elements are shown in the prior art (see fig. 26B of the instant Application, which is a prior art as per Applicant's Admission).
- 6. A telephone call was made to Howard L. Bernstein on 01/29/2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

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7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Correspondence/Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GOLAM MOWLA whose telephone number is (571) 270-5268. The examiner can normally be reached on M-F, 0900-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXA NECKEL can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/G. M./ Examiner, Art Unit 1795

/Alexa D. Neckel/

Supervisory Patent Examiner, Art Unit 1795